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NM

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
08/484,935	06/07/95	MOORE	NANO-001/090

B3M1/0822

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EXAMINER	
ENG, D	
ART UNIT	**PAPER NUMBER**
2315	

DATE MAILED: 08/22/97

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

☒ Responsive to communication(s) filed on 6/17/97

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-25 + 77-100 is/are pending in the application.
Of the above, claim(s) _____ is/are withdrawn from consideration.
☒ Claim(s) 1-25 + 77-100 is/are allowed.
☐ Claim(s) _____ is/are rejected.
☐ Claim(s) _____ is/are objected to.
☐ _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
☐ The specification is objected to by the Examiner.
☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.
☐ received in Application No. (Series Code/Serial Number) _____.
☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of Reference Cited, PTO-892
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
☒ Interview Summary, PTO-413
☐ Notice of Draftperson's Patent Drawing Review, PTO-948
☐ Notice of Informal Patent Application, PTO-152

The amendment filed on June 17 1997 has been entered. Claim 76 has been canceled. The active claims are 71-75 and 77-100.

Claims 71-75 and 77-100 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The scope of meaning of the following claim language is not clear:

1. "Instruction--accesses--instructions" in line 7 of claim 71.

2. "Operands and instructions being located relative to said instruction groups" in line 8 of claim 71.

3. "Supplying means to supply to said central processing unit a remainder of said first of said instruction groups as operands" in claim 77. It is not seen how instructions can be supplied as operands. Other claims have similar defect. See claims 78-79 for examples.

Further with respect to claim 71, function of the instruction register and the instruction supplying means is not clear. Instruction register and instruction supplying means which are commonly for receiving and supplying instructions are recited for receiving and supplying operands.

With respect to claim 72, function of the SKIP instruction is not clear. The instruction fetching means and the supplying means as recited are no different from their normal operation when they are in response to the SKIP instruction. It appears that nothing is being skipped. Description of the MICROLOOP instruction has similar defect. See claim 74 for example.

Scope of claim 73 is not clear. Note that an instruction decoder is commonly for decoding instructions. The claim fails to recite specifically what the decoding means actually does in reesponse to the SKIP instruction based on existence of the predefined condition. No meaningful operation is seen from the claim. Claim 75 has similar defect.

Claims 91-100 have similar defects set forth above.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 71-75 and 77-100 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boufarah in view of May.

Detail of the rejection has already been set forth in the last Office action. The detail is incorporated herein by reference thereto.

In the communication filed on June 17 1997, applicants rely on the amendment of the instruction fetching means for patentability. Firstly, it is not quite clear what "--at least one instruction that accesses operands or instructions or both, said operands and instructions being located relative to said instruction group" means. Secondly, it is well know that instructions in all computer programs, including Boufarah's and May's programs, are arranged in sequential order. In other words, all instructions within a computer program are located relative to each other or to each other groups if they are logically grouped. Furthermore, Boufarah also teaches that instructions are stored in a group of 8 in sequential instruction buffer 38 and in a group of 4 in the

targer instruction buffer 36 (see lines 20 of column 7 in Boufarah). An instruction being located relative to an instruction group is not patentable over the applied art.

With respect to the remarks directed to the SKIP and the MICROLOOP instructions, the SKIP and the MICROLOOP instructions are nothing more than a special type of branch instruction. For example, jump from the current instruction to another instruction which is 1 to n instruction length away is no different than skipping the instructions in between. Looping is nothing more than restricting the computer to jump backward instead of foreward. How far the jump is is a matter of design choice.

All the elements recited in the claims can be found in the combined teachings of Boufarah and May. No improvement is seen.

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ART UNIT 232